Forensic Chemist III, Alcohol Program Vermont Forensic Laboratory Department of Public Safety 103 South Main Street Waterbury, VT 05671-2101 Phone – (802) 244-8788 Fax – (802) 241-5557

Email – amanda.bolduc@.state.vt.us

EDUCATION

Degree Bachelor of Arts

Major **Biology** Minor Chemistry

University of Vermont – Burlington, VT College

Year 2002

Master of Forensic Science Degree

Maior Forensic Science

College National University - San Diego, CA

Year 2004

PROFESSIONAL WORK EXPERIENCE

Forensic Chemist III, Alcohol Program

Vermont Forensic Laboratory, Waterbury, VT

Performs qualitative and quantitative confirmation testing for alcohol in blood.

- Performs technical review of blood alcohol testing results.
- Performs calibration, certification, installation, maintenance and repair of evidential breath alcohol analysis instruments.
- Reviews documentation and reports generated by DataMaster DMT breath testing instruments.
- Instructs police officers in the proper use as operators and supervisors using DataMaster DMT breath testing instruments.
- Reviews current literature and studies on alcohol physiology, pharmacology and testing.
- Provides expert witness testimony regarding alcohol physiology, pharmacology and testing, including policies and procedures.

Forensic Chemist II, Alcohol Program

3/1/2012 to 11/4/2012

11/4/2012 to present

Vermont Forensic Laboratory, Waterbury, VT

- Performed qualitative and quantitative confirmation testing for alcohol in blood.
- Performed calibration, certification, installation, maintenance and repair of evidential breath alcohol analysis instruments.
- Reviewed documentation and reports generated by DataMaster DMT breath testing instruments.

- Instructed police officers in the proper use as operators and supervisors using DataMaster DMT breath testing instruments.
- Reviewed current literature and studies on alcohol physiology, pharmacology and testing.
- Provided expert witness testimony regarding alcohol physiology, pharmacology and testing, including policies and procedures.

Analytical Chemist III, Organic Chemistry Program

12/2010 to 2/29/2012

Vermont Department of Health Laboratory, Burlington, VT

- Lead analyst for the alcohol group.
- Performed validation of the blood testing instrument.
- Performed confirmation testing for alcohol in blood.
- Conducted performance review of breath alcohol testing instruments. Lead analyst responsible for the
 testing and implementation of the DataMaster DMT evidentiary breath alcohol analysis instrument.
 Calibrated, certified, installed, and performed maintenance and repair of evidentiary breath alcohol testing
 instruments.
- Instructed police officers in the proper use of evidentiary breath alcohol testing instruments.
- Reviewed current literature and studies on alcohol pharmacology, physiology and testing.
- Provided expert witness testimony regarding alcohol physiology, pharmacology and testing.

Analytical Chemist II, Alcohol and Toxicology Program

5/2006 to 12/2010

Vermont Department of Health Laboratory, Burlington, VT

- Performed screening and confirmation analyses for drugs in urine.
- Performed confirmation testing for alcohol in blood.
- Performed analysis of capillary and venous blood samples for the presence of lead.
- Conducted performance review of breath alcohol testing instruments. Lead analyst responsible for the
 testing and implementation of the DataMaster DMT evidentiary breath alcohol analysis instrument.
 Calibrated, certified, installed, and performed maintenance and repair of evidentiary breath alcohol testing
 instruments.
- Instructed police officers in the proper use of evidentiary breath alcohol testing instruments.
- Reviewed current literature and studies on alcohol pharmacology, physiology and testing.
- Provided expert witness testimony regarding alcohol physiology, pharmacology and testing.

PH Laboratory Technician, Chemical Terrorism Preparedness Program

5/2005 to 5/2006

Vermont Department of Health Laboratory, Burlington, VT

- Technician for the Chemical Terrorism and Toxicology Programs.
- Performed screening for drugs in urine.
- Tested water for microcystin.
- Conducted a performance review of breath alcohol testing instruments.
- Accessioned and distributed samples for analyses.

PROFESSIONAL TRAINING

Vermont DataMaster Operator Course, Vermont Police Academy, Pittsford, VT, October 2005

Vermont DataMaster Supervisor Course, Vermont Police Academy, Pittsford, VT, May 2006

Borkenstein Course on Alcohol and Highway Safety: Testing, Research, and Litigation, Indiana University Center for Studies of Law in Action, Bloomington, IN, December 2006

DataMaster DMT Training, National Patent Analytical Systems, Inc., Burlington, VT January 2008

Forensic Mass Spectroscopy, Cedar Crest College Forensic Science Training Institute, Allentown, PA, June 2009

Headspace Troubleshooting Made Easy, Teledyne Tekmar, online, December 2011

DataMaster DMT Technical Training, National Patent Analytical System, Inc., Waterbury, VT, July 2012

Introduction to Uncertainty in Forensic Chemistry and Toxicology 1, 2 & 3, online, November 27, 2012

"To Hell and Back: The Ethics of Stewardship and the Stewardship of Ethics", online, November 28, 2012

Gaining Speed with "Fast GC": A Practitioner's Perspective, online, December 20, 2012

LC/QQQ Screening for 300 Designer Drugs and Metabolites, online, February 27, 2013

LC/MS/MS Validation of a Cannabinoid and Benzodiazepine Method with Comparison to the Proposed SWGTOX Method Validation Standards, online, June 20, 2013

DataMaster DMT Advanced Training Course, National Patent Analytical System, Inc., Waterbury, VT, July 24, 2013

International Association for Chemical Testing Annual Conference and Workshops, Newport Beach, CA, April 7-11, 2014

New Developments in Clinical Research and Forensic Technology using LC/MS/MS, AB Sciex, April 22, 2014

Introduction to Forensic Toxicology by Mass Spectroscopy, Agilent Technologies, Waterbury, VT, April 29-30, 2014

Supervisors' Development Program, Vermont Department of Human Resources, Berlin, VT, June 12, 2014

Advanced Roadside Impaired Driving Enforcement, Vermont Criminal Justice Training Council, June 17018, 2014

PROFESSIONAL MEMBERSHIPS

International Association for Chemical Testing member since 2007

North Eastern Association of Forensic Scientists member since 2007